

---

---

# **SIMPLIFIED ACQUISITION PROCEDURES COURSE: OPERATIONAL TRIAL RESULTS**

August 1997

Prepared For:

**DEFENSE ACQUISITION UNIVERSITY**

Prepared By:

**HUMAN TECHNOLOGY, INC.**

## Table of Contents

	<b><u>Page</u></b>
<b>Executive Summary</b>	1
<b>Background</b>	2
<b>Purpose</b>	2
<b>Findings</b>	
Internet Use and Experience	3
Course Registration and Administration	4
Course Lessons and Mastery Test	6
<b>Overall Comments</b>	
Lessons	8
Installation and Plug-Ins	9
Internet	10
Registration	10
Mastery Test	10
Overall	11

## **Executive Summary**

The Simplified Acquisition Procedures (SAP) Course is the Defense Acquisition University's (DAU) first offering that uses the Internet as a tool for training, performance support, and collaboration. This report presents the findings from the training evaluation study conducted after the first operational trial. Following are highlights from this study:

- ◆ Students unanimously reported that they enjoyed taking the lessons and that the interaction built into the SAP lessons enhanced their ability to learn. In addition, students reported that they favored online learning because it enabled them to take the course when it best fit their schedules. Students also noted that learning via the Internet helped to introduce them to the use of new technologies.
- ◆ Prior Internet experience was not necessary to in order to use the course materials and resources.
- ◆ More than 75 percent of the students reached mastery on the first test trial. Nearly 100 percent of the students reached mastery by the third test trial. Students reported that the test items accurately assessed the stated lesson objectives.
- ◆ Many students contacted the help desk for technical assistance in loading the software needed to operate the course. Every help desk question has been analyzed and solutions have been developed to address most of the issues. In the near term, there will be a need for continuation of help desk support for Internet-based courses that require the installation of software on the user's machine.
- ◆ Comments about the course contents indicate that it was accurate and clear. The few content issues that were raised by the students were reviewed and minor revisions have been made to the SAP lessons.

The SAP trial demonstrates that technology-based instruction can deliver training that is personalized and interactive. In addition, individualized attention from an instructor is possible due to the capabilities of the Internet. This powerful combination of instructional techniques offers students a high-quality educational experience.

## **Background**

The National Defense Authorization Act of 1993 established the Defense Acquisition University (DAU). The Defense Acquisition Workforce Improvement Act (DAWIA) directed DAU to establish an education and training program to develop a highly-qualified workforce capable of performing current and future acquisition functions.

The passage of the Federal Acquisition Streamlining Act (FASA) and the Clinger-Cohen Act has created new ways of doing business. One new business practice is the use of Simplified Acquisition Procedures (SAP). These procedures empower acquisition personnel to use innovative approaches in order to get the best value for the Government. The purpose of this project is to provide training to acquisition personnel on how to implement SAP through training delivered over the Internet and by CD-ROM.

The SAP Course was developed to benefit the entire DoD acquisition workforce. This workforce totals more than 100,000 employees. The specific target population for this course includes approximately 25,000 acquisition professionals including contract specialists, negotiators, procurement analysts, purchasing agents, and administrators. In addition, acquisition staff throughout the Federal Government may find this course useful.

## **Purpose**

The first offering of the course was offered as an operational trial. A total of 50 students were selected to take the course during this operational trial. These students took the course under the self-study format to be used when the course is fielded fully. Each student was contacted before the operational trial with instructions for registering and taking the online course. They were told they had 30 days from the day they registered to complete the course. After each student completed the course, his or her comments about the course were collected. This document presents their findings gathered through online feedback and telephone contact.

## Findings

### *Internet Use and Experience*

#### Internet Experience

Internet experience was not a prerequisite for taking this course, however, familiarity with the Internet and the World Wide Web did have some advantages. The understanding of how the Internet worked allowed students to move more freely through the course content and course resources. A section on Internet terminology might benefit those students with limited or no Internet experience.

#### Accessing the Internet

The Internet is emerging as a new tool for delivering training and providing electronic performance support systems. It is important for acquisition personnel to become knowledgeable and comfortable with these new technologies and to learn to use them effectively.

Students favored online learning. It enabled them to take the course to fit their schedules and at their individual pace. They felt it was a valuable resource to learn about emerging technologies.

Accessing encountered error messages, but the students were able to access the course after rebooting their machines.

Based on our recent SAP Help Desk experience and the course management data, the following significant conclusions may be drawn (potential solutions are indicated):

- ◆ Approximately 14 percent of the students were unable to successfully access the lessons online due to hardware, software or network constraints. Specifically, these included:
  - One student was in an office running IBM OS2/WARP. Currently, there is no Macromedia Authorware plug-in for this operating system. **Solution:** Download executable files from site.
  - Four students were on a network with inadequate Internet access and bandwidth to display the course lessons. The effective bandwidth at these locations was below 2400 BPS. **Solution:** Download executable files from site. **Solution:** Mail CD-ROM or have command provide dedicated access.
  - Two students were using MacIntosh computers. **Solution:** Complete cross-platform authorware code testing.

**Findings (Continued)**

*Course Registration and Administration*

Process for Registering

New users were prompted to go to the "Log-in and Welcome" page, where they self-registered for immediate course access. The student was asked to enter demographic, e-mail address, password, and other data in the form and submit to server for processing. They were required to complete certain minimum fields prior to being allowed to self-register.

The length of the registration process was frustrating to the course registrants. They also indicated that having to go back and correct any incorrect entries several times was bothersome when they did not know what type of response was required. One person indicated that they had to stop what they were doing to get information off of Block 38 of the SF-50. This person also suggested that providing a list at the beginning of the registration process outlining all the information a person needs to successfully register for the course would streamline the process.

**Note:** Based on online feedback received by June 30, 1997, the registration process has been reviewed and modified.

Contact with SAP Course Instructor

Upon registering for the course, each student was assigned a course instructor. The instructor was available by automatic e-mail messaging.

Of those reporting that they did try to contact the instructor with question(s), some mentioned that the time for the instructor to respond to their question(s) was too long, but once the question was responded to they were able to move forward. Students mentioned that they felt the instructor did not directly contribute to their learning the course content, but was helpful in other ways. Still, several students indicated that the instructor enhanced their learning process and responded to their needs.

## **Findings (Continued)**

### *Course Registration and Administration*

#### Reaction to Course Resources

A directory of course-related resources to support student progress through the course was available.

The course resources that the students found useful include:

- ◆ iMart Market Research link
- ◆ Acquisition Reform links
- ◆ Resources explaining the FAR in detail
- ◆ Students preferred to use the feedback function to communicate with instructors. The chat room was not used during this course. This is not surprising, since this is a Level One course and does not require student interaction.

#### Help Desk Interaction

If students encountered problems that they could not work through by reviewing the "Troubleshooting" section or with the help of their local system administrator—a Help Desk was established for any unanswered questions.

A sampling of students that were interviewed did have a need to call the Help Desk at one point or another while taking the course. Problems directed to the Help Desk included: the time difference for those located outside the eastern standard time zone; the answering machine messaging—when students had a problem, they could not move forward until they got an answer, and they often had to leave a message. Finally, in order to call the Help Desk, they had to sign off of the Internet, go out of the course to use the telephone line to call, and then when they did get the help they needed, they did not know whether the help worked or not, until after they logged back in and tried. Students communicated that the Help Desk Technician was very helpful and responsive to their problems. If the technician was not able to solve the problem immediately, he did not drop the issue; he provided the students with a temporary solution until he could followup with the actual fix.

Help Desk support was critical. The current status of web-based streaming technology makes independent plug-in installation difficult in approximately 20 percent of student attempts. This was due to a variety of technical circumstances, such as:

- ◆ Multiple browsers on the same machine
- ◆ Recent upgrade to Windows 95 without a concurrent upgrade of the browser to 32 bit
- ◆ Out-of-date browser
- ◆ Blocking of Shockwave files by network administrators
- ◆ Network firewall settings

**Findings (Continued)**

*Course Lessons and Mastery Test*

Accessing the Lessons

Aside from initial problems with downloading the plug-in, students encountered minimal problems accessing lessons and the lesson resources appeared quickly. When problems did arise rebooting and relogging in was a quick fix for most. The most cited problem with accessing the lesson stemmed from downloading the Macromedia Shockwave plug-in required to take the course. Many students indicated that they downloaded this more than once and still didn't get it right until they received technical assistance from their local tech aide or the Help Desk.

Reactions to Working through the Lessons

The students felt that they were adequately prepared to work through the lessons. They felt the interface tutorial walk through preceding Lesson 1 was a nice overview of what they would see and expect. Some of the features, such as the bookmarks and checklist did not always work as they expected, which generated some confusion at times. These technical problems have now been resolved.

Learning the Lesson Content

The course consists of the following nine lessons:

- Lesson 1: Simplified Acquisition Procedures
- Lesson 2: When to Use SAP
- Lesson 3: Describing Agency Needs and Conducting Market Research
- Lesson 4: Sources
- Lesson 5: Methods of Purchase
- Lesson 6: Methods of Solicitation
- Lesson 7: Making SAP Awards
- Lesson 8: After the Award
- Lesson 9: Course Summary

The students felt that the course lessons were well thought out and encompassing of relevant information. They were very pleased with the way the lessons were presented in the office setting and favored the graphics as well as the interaction. They felt as though this added the personal (human) touch to the course. The Jeopardy game was a hit!

Overall, the lessons accomplished the learning objectives.

**Findings (Continued)***Course Lessons and Mastery Test*Taking the Mastery Test

Completing the mastery test was required for successful completion of the SAP course. Registered students were able to take the mastery test at any time following the completion of Lesson 1.

The items in the test were an accurate assessment of the learning objectives stated at the beginning of each lesson. Although all the students providing input did successfully complete the mastery test, one student commented that, “obtaining 80 percent on each section is really strict, because if someone was weak in one area and missed two questions they would not pass even if they got 100 percent in the other two areas.”

**Note:** Mastery Test performance was effective in all browser/operating system environments except Internet Explorer/Windows 3.1. Steps are being taken to resolve this incompatibility issue with Allaire Corporation. Several students (approximately 5) have been unable to take the test online due to this problem.

Student Test Performance

The table below provides results of the student test performance.

<b>T e s t  T r i a l</b>	<b>Lesson 2</b>	<b>Lesson 3</b>	<b>Lesson 4</b>	<b>Lesson 5</b>	<b>Lesson 6</b>	<b>Lesson 7</b>	<b>Lesson 8</b>
<b>1</b>	76.09%	89.47%	79.55%	83.72%	75%	82.98%	78.26%
<b>2</b>	15.22%	5.26%	15.91%	6.98%	16.67%	4.26%	15.22%
<b>3</b>	8.7%	5.26%	4.55%	9.30%	8.33%	12.77%	6.52%

The above percentages represent the proportion of students who attempted the lesson, and that successfully completed the lesson within the first, second, and third trial.

- ◆ Two registrants attempted to take the performance test in all areas and failed.
- ◆ Two registrants attempted to take the performance test in two areas (Lesson 5 and Lesson 7) and failed.

## Overall Comments

The following comments were provided by the students through online feedback. These are direct quotes from students. Based on this feedback received by June 30, 1997, comments were reviewed and modifications to the course have been made.

### Lessons

- ✧ *I took a seminar on Commercial Item Acquisition for NCMA, happy to say, all data agreed with what they reported and taught in March 97.*
- ✧ *Internet link to //www.vivamus SUPERB!*
- ✧ *Upon exiting Lesson 3, found all links I wanted earlier for Market Research. Great starting place for a new acquisition.*
- ✧ *Like the flashing red "Batman" phone.*
- ✧ *Lesson 3: Wanted to print out other Internet Market Research Resources Available, my computer would not let me.*
- ✧ *Lesson 5: IMPAC was mandated by Gen. Fogleman for use of all eligible purchases under \$2,500 (construction under \$2,000) by 1 Oct 97.*
- ✧ *All in all, a good, simple IMPAC overview.*
- ✧ *End of Lesson 5, again more great sites to look into, especially IMPAC. I like how the program resumed when you re-enter a lesson already taken OR gives you the option to start over.*
- ✧ *I like how you can go forward or backward in the program and see what happens if you do put the wrong answer. It tells you why you're wrong.*
- ✧ *Great push for IMPAC over purchase orders.*
- ✧ *More great examples to explain and put learning to use, not just conceptual.*
- ✧ *Need to know for Commercial Item Acquisition that there are exemptions from Procurement Laws, FAR was amended to include a list but had not been available in March 97. I still have not seen the "list."*
- ✧ *I like the knowledge checks.*
- ✧ *Friday, 6 Jun 97, loaded fast this morning. Lesson 8, I liked the SAP News interaction, more good graphics, keeps it interesting.*

**Overall Comments (Continued)**

Lessons

- ❑ *Lesson 9 super!! Cute, I like the referee. I won \$19,600 the first time and \$31.2K the second, please forward ASAP. Great idea, I also like how if you go back the second time, the program mixes up the questions, answers, and dollar amounts.*
- ❑ *In Lesson 5 there are some concerns with the depth of the definitions, some are incomplete or broad. For example, you discuss the BPA method, however, you do not stipulate that this method requires competition, or the need to establish multiple sources as a base for adequate rotation. This leads a novice to believe issuing these agreements eliminates any need for further competition.*
- ❑ *Neither Lesson 5 or 6 touch the issue of GSA FSS awards or the comparison issue. Is this an oversight, or will it not be included.*

Installation and Plug-Ins

- ❑ *You assume that Govt. employees know all the technical specs re: their work PCs, which is not the case. I don't know WHERE to install the software, and keep getting messages when I go to Lesson 1 that it's not viewable. But I installed Shockwave and the Graphics library twice! How do I ensure it's installed in the right place?*
- ❑ *To say we need 28.8 modems, etc., is great, but I don't know anything about my work modem, memory, capacity, etc., because I'm not the one who set it up, and because it works through a LAN (which, of course, my home PC does not). It doesn't do much good to talk to the tech stuff in your instructions if the person taking the course doesn't know the tech capability of the PC the government provided him or her with, and doesn't get to install anything without calling the Help Desk first!*
- ❑ *At beginning, tell students to close all other applications, especially any open e-mail applications. Too many applications not only slows down the program, it may cause you to get "kicked off." Suggest checking their e-mail between lessons when taking small breaks if waiting for important messages. If Windows freeze up, reboot Random comments: great graphics, great interaction, use of applications (phone, to-do list, and computer e-mail)¾ good meaningful examples to explain lessons.*
- ❑ *Trying to get into Lesson 7, received an Authorware Message "Unable to display Factors?" because an error occurred when reading the icon (probably bad data). If you continue other objects may also fail to appear.*
- ❑ *When attempting to access SAP lessons, I get the following warning: "Authorware Map File contains only Windows information and is not usable by Macintosh." I am using a PowerMac 7200/120, with 40MB of RAM, System 7.5.5.*

**Overall Comments (Continued)**

Installation and Plug-Ins

- ✧ *Downloading instructions are not clear. Unless call is made to Help Desk, downloading can't be done successfully. While in Lesson 1: No "Exit Help" button to click on except for words in instructions. When clicking on "Reference" box, next message overlaps previous message making it difficult to read second message. Nothing to click on to continue with Lesson 1 - "Quit" button doesn't work.*
- ✧ *Lessons will not download to initiate course.*

Internet

- ✧ *I hit continue, icons disappeared. I backed up a screen then hit "next" and the icons came back. All was well.*
- ✧ *When I try to initiate Lesson 1, the Internet goes dead. After punching enter on lesson begin, everything stops.*

Registration

- ◆ *The registration script/form should include whatever codes are required as options to select from. One of the mandatory entries is a "Unit Code" from Block 38 of a SF-50. PLEASE list the codes somewhere! The alternative is to hunt down a SF-50 to figure out what code to enter. An electronic course is a great idea, but the registration has to be fairly straightforward because people will not waste their time with administrative things.*
- ✧ *Your registration procedure needs some work. I don't have a clue of what a SF-50 is so I can't answer the installation code question. Get error message when trying to contact the sys admin at the integrity error page.*
- ✧ *Unable to register. Correct information is input; however, it keeps coming back with an error message that is unrecognizable.*

Mastery Test

- ✧ *I registered and downloaded the course, went through the lessons and summaries, and it won't let me take the final test. Any ideas as what I can do?*
- ✧ *I have completed all nine lessons and when I try to take the mastery exam, I get a prompt to complete Lesson 1. I retook Lesson 1 and still get the same prompt when I try to take the mastery exam. Any suggestions?*
- ✧ *I've been unable to take the test even after taking all of the exercises. Why?*

**Overall Comments (Continued)**

---

Overall

- ❑ *I look at this course as a great refresher to those working only one type of contracting (services or construction) and a great introductory level course to those new to the field.*
- ❑ *Under References, throughout program, might be useful to change color of visited FAR sites. That way saves time during the lesson. Netscape does this, but I don't know if this program allows this type of "option." But, it would save time.*
- ❑ *I like how certain bullets will take you to FAR sites and they link up with other bullets' FAR sites logically.*
- ❑ *I think this is an excellent means of training.*

***The following comments are actual E-Mail received via the Feedback Button:***

- ❑ *First, I would like to begin by saying that the course works very well from a technical standpoint. Some recommendations for improvement include the following: (a.) It would have been very helpful if there was a feedback button for the instructor on each page of the lesson. (b.) It would be helpful to remediate students when they complete the mastery test; i.e., at the end when it gives you the score, have a remediation button which would take them into remediation on the questions they missed. (c.) I didn't get the letter (e-mail) that I was supposed to receive when I completed each chapter, nor did I get the letter (e-mail message) that I was supposed to receive when I completed the course. (d.) When I completed the "to do" list at the end of Lesson 2 and tried to quit, I got a message that said I had not completed my "to do" list. Is the bookmark working properly? (e.) Sound would be a nice option for the future for those of us who have sound capability since your eyes get very tired when you do 5 or 6 lessons a day just reading. (f.) And last, but not least, I want the option to cut off the ringer to my telephone!!!!!!!!!!!!!! Really, it was a great job! Keep up the good work.*
- ❑ *Lesson 1: The Screen that shows Part 12, 14, 15, 35, & 36 on books that are hot linked. I understand that the verbiage on this page is a direct quote from the FAR, but I think it is misleading in that some people are interpreting the FAR and probably will misinterpret this screen to mean that you can issue a RFP and an IFB for acquisitions under \$100,000 and it would still be considered using a simplified acquisition procedure. I have discussed this with Steve Cohen, the Executive Secretary of the DCCMB, and he and I both agree that it would be very helpful if this course listed the simplified acquisition methods/procedures, i.e., SF 44, Third Party Drafts, BPAs, Purchase Orders (Priced and Unpriced); Governmentwide Commercial Credit Cards. (2.) Lesson 2 - Job Aid 3 (Examples) - Why can't SAP be used to acquire some developmental items over \$5 Million? See FAR 13.601(a) and FAR Part 2 definition of commercial item subparagraph (h). (3.) Lesson 5 a. BPAs - One of the bullets says "BPAs specify items/services and prices, but not exact quantities or deliveries." Does this mean that we are no longer authorized to issue unpriced BPAs? b. Boiler Explosion - Recommend listing an unpriced PO as an option since that is really the answer. For those of us who have been in contracting for a long time, we interpret PO as meaning "priced PO". (4.) Chapter 6 a. Requirement for Paint - Recommend changing the wording to be a little clearer. I chose placing the order, because I had read the intro to mean, I had bought paint and a lot of other things for my home from that supplier instead of, I had purchased paint for the Government from the contractor.*

**Overall Comments (Continued)**

---

Overall

*It took me a few minutes to understand your answer because I couldn't figure out what buying paint for my personal use had anything to do with buying for the Government! b. Refuse Collection for Armed Forces Day - Why would you issue a paper solicitation for a one time \$3,000 requirement. Why could I not do it orally and fax the wage determination to the vendors solicited? I would recommend you change the \$ threshold to \$30,000 which makes paper the more obvious choice due to posting and synopsis requirements. (5.) Several of the exam questions had typos. (6.) Overall, the course was well written and provided a lot of good information.*

- ❑ *There were just a couple of areas within the instruction that I felt should be clarified to avoid confusion on the part of someone new to the field taking this course. In Lesson 2, there was an area that listed in descending order, required sources. A BOA was listed on a line, with I think Federal Supply Schedules, above Open Market items. I felt this was misleading, since a BOA is simply an agreement, which would not be utilized until after competition deemed the BOA response was the award recipient. The existence of a BOA does not justify not using FACNET, nor does it give preferential or sole-source status over other commercial sources. Lesson 4, Draft Memo, titled "Required Sources," has an error. The topic states "not available from Federal Prison Industries" already, so this should not be an option, much less the correct option, in the answers. Lesson 6 has a couple of areas I'd like to mention. In one area, a sole-source procurement gives a correct response as a written solicitation. I think the correct answer should include a CBD notification of intent to negotiate on a sole-source basis with the written solicitation answer you have indicated. I know the combined CBD solicitation/synopsis was not the correct response in this instance because the item was not commercial, but I felt the correct answer should be expanded. Also in Lesson 6, there was an area that listed Pre-Fab Storage Sheds, a commercial item. If this was my requirement, estimated over \$100K, I would use FACNET as the preferred method, since this is a SAP procedure, commercial item, under \$5M. My final concern was in Lesson 7 where it was talking about the total cost to the Government. There seems to be a mix up here between total cost and total evaluated cost. The total cost to the Government is the obligated amount, which in this instance was \$18K. The total evaluated cost is \$18.5K. Again, I think this is a distinction that should be made. The CON 101 class teaches this principle. I hope the statements contained herein do not sound too critical, because overall I thought this exercise was absolutely fantastic!! Believe me, I certainly wasn't expecting something that offered the interaction that this class did. It was very enjoyable, and I am very honored to have been selected to participate in the pilot testing. Please note, I will be going TDY on June 9-27, so I will be unavailable during that time for additional feedback.*
- ❑ *I think that this is a wonderful course; the format and content are great. I am going to recommend this to my squadron as the best way yet to get up to date on SAP! Thanks.*

**Overall Comments (Continued)**

---

Overall

- ✧ *I completed the SAP course last week. Now, I would like make a comment or two in regards to the course. (1.) With many years(20+) in the buying/purchasing field, I have always seen the need to stay current. This is even more so now. Changes are coming so fast, it is hard to know what's the latest change. (2.) Electronic/usage is moving as fast or faster and staying current is difficult at best. (3.) There has not been a single source to go for current data or training that was easy, quick and accurate. These have all been fulfilled by this course. I hope that this will only be the start of a trend. Please continue to add courses of this nature and allow us to complete them at our PC's. This course was a very good update. It's layout, content, and progress were very helpful. I would say that this is a large step toward staying current with all of the changes coming down the road. "Kudos to all who have a hand in this."*